WATER RESOURCES COMMISSION
4056 Plainfield Avenue, N. E.
Grand Rapids, Michigan 49505

December 11, 1973

Mr. George Matthews
Vice President of Manufacturing
Union Steel Products
Albion, Michigan 49224

Dear Mr. Matthews:

In light of recent events, I would like to set forth the action I believe you should take to improve the disposal methods for the precipitated metallic sludges from your waste treatment operation. This improved operation would apply to the landfill area operated by Mr. Stevick, as well as any other approved site. The Stevick site, itself, was approved for your company's sludge disposal many years ago, prior to the adoption of Act 136, "the industrial waste hauling act." However, concern has been raised regarding improper management of this site.

As a result of Act 136, definite requirements and methods of operation have been established which apply to all sites used for the disposal of liquid industrial sludges. For instance, no wet sludges of any nature should be placed directly on the landfill in conjunction with normal solid waste. To our knowledge, you have adhered to this procedure.

In regard to disposal sites, the best demonstrated operating procedure calls for cells or defined earthen basins set aside to receive the treated sludges. The depth of sludge should seldom be allowed to exceed two feet. Under these conditions, the sludge can dewater and dry in a reasonable length of time. The dried sludge can then be removed and placed in a selected location in the landfill for burial. This procedure provides for a rotating sequence of cell use.

In addition to proper operating procedures, specific monitoring requirements of the ground water and of the material placed in the drying basins is required. It is necessary to assure that the pH of the liquid sludge is not less than 8.5, and that no type of liquid acidic wastes are allowed in the drying basins. This is to assure that redissolving of the heavy metals will not occur. Analyses of the sludges for specific heavy metals and cyanide will also be required. A series of monitoring wells should also be placed near the drying basins particularly in the direction of ground water movement, and a program of sampling and analyses established to pick up any changes in ground water quality.

Our field examination of the Stevick site you have been using for the past several years indicates it meets many of our requirements. The site is fairly well isolated, and is not likely to create ground water problems. However, closer control must be exercised if your company plans to continue to utilize this site. This could be done through a lease arrangement or other understanding with Mr. Stevick. You may want to haul your own wastes, or engage a licensed hauler to utilize your own specific area. I believe this could be accomplished very readily for your immediate needs in using the Stevick site. The above guidelines could be used later to help you select your own site for possible approval if this appears desirable. Future plans should also include the evaluation of additional sludge treatment at the plant site to produce a relatively dry compact sludge suitable for direct disposal at an approved landfill operation.

If it is decided to utilize the Stevick site for your current needs, you must submit a site plan and method of operation.

Very truly yours,

WATER RESOURCES COMMISSION

Chester Harvey,
Basin Engineer

RP/mc
cc: K. Zollner